

## ABSTRACT

An integrated or attached (built in or retrofitted) space occupying (fills space beneath the chin) cephalic restraint collar (holds the head in the axis of rotation) for improved personal flotation device ("PFD") performance. The restraint assists with aligning and securing the head and neck in line with the axis of rotation. In this position the ballast of the head is divided evenly about the axis of rotation negating its ability to oppose effective rotation. The cephalo-cervical restraint improves the efficacy of all PFD designs elements targeting turning. By guiding the head into a cylindrical notch in the posterior cervical foam behind the victim's head the head is then aligned along the axis of rotation where the heads 14-17 pounds of ballast is symmetrically distributed about that axis. Therefore, whatever eccentric forces are applied in the generation of angular acceleration or torque, do not have to overcome the offsetting effects of the heads ballast acting as a mobile ballast element. Preferably, the collar has soft inner fabric for comfort and warmth.

I:\9000\9297\Patents\6823 (RestraintCollar-RegUS)